

ABSTRACT OF THE DISCLOSURE

A high-power amplifier changes matching conditions of an output matching circuit 5 connected between a final stage amplifying element 3 and an output terminal 8 in response to the output power of the amplifying element 3. Thus, the efficiency at low output power can be greatly improved without reducing the efficiency at the maximum output. Besides, since it is not necessary to load a DC-DC converter, an increase in size or cost can be prevented.